Amendments to the claims

1. (Currently Amended) A database system, for storing and managing data that are used by application programs to execute a specific operation, comprising:

a hierarchical node database wherein data used for said application programs are stored as node data in data records; and

a hierarchical link table, provided for each of said application programs, ~~wherein~~ which comprises relationship data~~, which define the~~ that defines a hierarchical structure of said node data that are stored in said hierarchical node database~~, are stored as data entries in said data records~~, wherein the hierarchical link table includes effective period data that defines effective periods for the defined hierarchical structure.

2. (Cancelled)

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3. (Currently Amended) The database system according to claim ~~2~~ 1, wherein~~, in~~ said hierarchical node database~~, said~~ includes effective period data that define said effective periods for said data records, which are stored as data entries in individual data fields.

4. (Original) The database system according to claim 3, wherein each of said data records in said hierarchical node database includes a fixed-length column in which only data entries having a constant size are stored, and a variable-length column in which only data having variable sizes are stored.

5. (Original) The database system according to claim 4, further comprising a cycle control table in which cycle data are entered to define execution timings for said application programs that execute operations at constant time intervals.

6. (Previously Amended) A database system for storing and managing data for use by a plurality of application programs that perform distinct operations, comprising:

a hierarchical node database for storing node data to be used by a first and a second application program;

a first hierarchical link table for defining a first unique hierarchical structure of the node data for use when the first application program is run, wherein the first hierarchical link table includes an identifier that identifies the first application program; and

a second hierarchical link table for defining a second unique hierarchical structure of the node data for use when the second application program is run, wherein the second hierarchical link table includes an identifier that identifies the second application program.

7. (Previously Amended) The database system of claim 6, wherein the node database comprises a plurality of data entries, each having a node identifier and a set of node attributes, and wherein the node attributes comprise non-relational data.

8. (Previously added) The database system of claim 7, wherein the each hierarchical link table includes a set of links that define relationships between parent and child nodes using the node identifiers from the node database.

9. (Previously added) The database system of claim 8, wherein each hierarchical link table includes time period fields for each link to optionally establish start and end times for each link.

10. (Previously added) The database system of claim 7, wherein the each data entry in the node database includes time period fields to optionally establish start and end times for each data entry.

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11. (Previously amended) The database system of claim 6, wherein the first application program provides a first monetary rate scheme for a telecommunications provider, and the second application program provides a second monetary rate scheme for the telecommunications provider.

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12. (New) A database system, for storing and managing data that is used by a plurality of application programs to execute distinct operations, comprising:

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a hierarchical node database, wherein data used for the application programs is stored as node data in data records, and wherein the hierarchical node database includes effective period

data for at least one data record that defines a time period when the at least one data record is effective for each of said plurality of application programs; and

D2 a hierarchical link table, provided for each of said application programs, which comprises relationship data that defines a hierarchical structure of the node data that is stored in the hierarchical node database.